

Two New Trimble Airborne Lidar Systems Announced



Trimble has added two new additions to its airborne Lidar portfolio. The Trimble AX60i and AX80 have been developed to meet the demands of aerial survey operators for corridor and wide-area mapping projects. The new airborne systems, together with flight planning and analysis software tools, have been designed to provide rapid and efficient point cloud capture as well as high-resolution images and proven workflows with high productivity. The systems can be installed on either fixed-wing or rotary aircraft.

Designed for low-altitude corridor mapping applications, the [Trimble AX60i](#) is an entry-level Lidar system built on the same platform as the high-altitude AX60 system. The platform allows AX60i users to easily upgrade to an AX60 in the future. The AX60i can be operated up to 5,000 feet above ground level (AGL) while offering a 400kHz laser pulse

repetition rate (PRR) with a single-channel, downward-looking laser.

The [Trimble AX80](#) is a dual-channel Lidar system that can be operated up to 15,500 feet AGL and is designed for the most demanding survey applications from high-altitude wide area mapping to detailed low-altitude corridor mapping. The AX80 offers an 800kHz PRR with revolutionary forward- and backward-looking capability to enhance point density on the ground and improve image resolution. This two-dimensional oblique view offers unparalleled scanning of vertical facades of structures.

An optional, fully-calibrated 80 megapixel camera with forward motion compensation can be added to the AX60i and AX80 systems. The camera is integrated into the sensor head package and harmonised with the laser sub-system so that it does not need re-calibration each time the system is fitted to an aircraft.

Aerial imaging

These systems are optimised for precision applications, providing a uniform distribution of laser points across the entire field-of-view to widen the usable swath width. Operators can reduce track overlap or duplication, or fly at higher altitudes to achieve a given resolution. Together with a high-precision positioning system, integral power supplies and an in-flight monitoring tool, the Trimble AX60i and AX80 can allow operators to lower the complexity of airborne Lidar surveys while increasing the quality of the output.

The Trimble AX60i and AX80 systems extend the company's portfolio of aerial imaging solutions to meet a variety of mapping applications, said Phil Sawarynski, business area director of Imaging Solutions for Trimble's Geospatial Division. They have been designed as true end-to-end solutions and are delivered with Trimble flight planning software and Trimble Inpho analysis software. Because everything is supplied by Trimble, operators can have confidence that the complete solution works together properly, and that the flight planning and post-mission analysis suites will enable them to provide a high-quality service to their customers, Sawarynski added.